

Padilla Bay Newsletter

A Joint Publication of the Padilla Bay Foundation and Padilla Bay National Estuarine Research Reserve

Spring 2004



Padilla Bay

National Estuarine Research Reserve

Padilla Bay National Estuarine Research Reserve is managed by the Washington State Department of Ecology under the National Estuarine Research Reserve System established by NOAA.

www.padillabay.gov

swood@padillabay.gov

10441 Bay View-Edison Road
Mount Vernon, WA 98273
(360) 428-1558



The Padilla Bay Foundation is a membership-based non-profit organization formed in 1987. Its mission is to help preserve the Padilla Bay estuary in Skagit County, Washington, through support of Padilla Bay National Estuarine Research Reserve.

Padilla Bay Foundation
PO Box 1305
Mount Vernon, WA 98273
(360) 757-3234

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Resource Stewardship at Padilla Bay

One of the roles of the Padilla Bay Reserve, as a part of the National Estuarine Research Reserve System, is to protect the natural resources within the reserve. This means keeping an eye on the activities in and around the Reserve and on the status of the various resources in the Reserves—from water quality to the health of the ecosystem and its component parts. Resource stewardship is an underlying aspect of all we do at Padilla Bay. Researchers regularly monitor water quality in the bay and sloughs and participate in watershed efforts that promote the health of the bay. Education programs focus on the understanding and knowledge of estuaries and the surrounding watersheds and how our actions can impact the estuary.

One person, however, is on the ground (or in the mud) actively taking care of this valuable place. Sharon Riggs, the Reserve's Stewardship Coordinator has been busy with a variety of activities to preserve Padilla Bay's resources. Here are a few of her recent accomplishments.

Sharon hosted an "Aquatic Invasive Species Symposium" with speakers from state and federal government, universities, and non-profit corporations. She monitored and actively controlled two species of the non-native salt marsh grass, *Spartina*. She monitored the bay for the possible arrival of European green crab, *Carcinus maenas* using WA Dept. of Fish & Wildlife protocol and participated in a year-long pilot project to monitor for invasive crabs using shallow trays deployed in the mud flat. She found no invasive crabs.

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Padilla Bay Foundation News

Welcome to a New Board Member

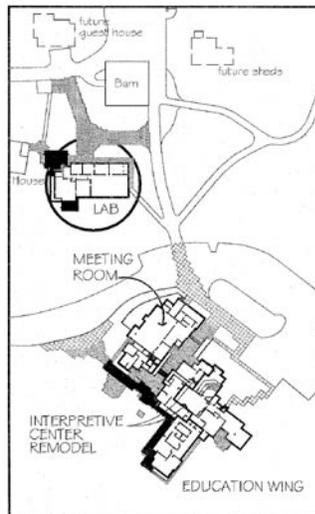
The Padilla Bay Foundation proudly announces the addition of a new board member. Mr. Dan Porter, President of Tesoro Northwest Company, has taken the place of Ms. Claire Taufer, Environmental Manager of Tesoro Northwest Company who has relocated to Martinez, California. We will very much miss Ms. Taufer, our former Vice-president, but wish her well in her move back to family and familiar territory. Mr. Porter joined us for our holiday season Board Meeting and reception and immediately dove into our foundation work. We are extremely appreciative and welcome Dan to our Board of Directors.

Exploring Cultural Attitudes Towards the Land

The Padilla Bay Foundation recently co-sponsored a very successful event at the Lincoln Theater. The Grand View: Changing Perceptions of the Land brought together writer Timothy Egan and artists Victoria Adams and Buster Simpson to discuss 150 years of cultural attitudes towards the land in the Northwest. Egan is the Northwest correspondent for The New York Times and author of *The Good Rain*, a cultural and environmental history of the Northwest since the arrival of European explorers. Vashon Island artist Victoria Adams paints fictional and serene landscapes that highlight contemporary longing for reconnection to the natural world. Seattle artist Buster Simpson directly addresses environmental issues and employs natural processes in his numerous public art projects sited throughout the world. Many of his works are large scale landscape works on a natural site. This event was supported by the Lincoln Theatre, Skagitonians to Preserve Farmland, the Skagit Land Trust, North Cascade Institute and the Padilla Bay Foundation. It was produced in conjunction with a new exhibition at LaConner's Museum of Northwest Art, The Grand View: Bierstadt to Brophy.

Benefactors for the Bay

There are many ways to contribute to the Padilla Bay Foundation. We are thankful to all the members who made end-of-the-year donations and to both new and renewing members for their support. The board is now ratcheting up efforts to raise matching funds for a federal capital awards grant. Board members are visiting local residents to explain the project and inform them about Reserve activities. It is heartening to see contributions coming in to this important campaign. All contributions will be matched 2.3 to 1 by federal funds, and will be used to complete the major facility upgrade now underway. The project includes the new lab building located between the barn and interpretive center (circled at right).



Padilla Bay Foundation

How You Can Help

Grassroots involvement is the core of Padilla Bay Foundation's commitment to protect Padilla Bay and support the Padilla Bay Reserve.

Membership in the Foundation means you are contributing directly to environmental education and research right here in Western Washington.

Categories of membership are:

Senior/Student	\$20
Individual	\$30
Family	\$40
School/Organization	\$50+
Supporting	\$60
Sustaining	\$100+
Small Business	\$100+
Sponsor	\$250
Patron	\$500
Steward	\$1000

Send your contribution to:
Padilla Bay Foundation
PO Box 1305
Mount Vernon, WA 98273
(360) 757-3234
a 501 (c) 3 organization

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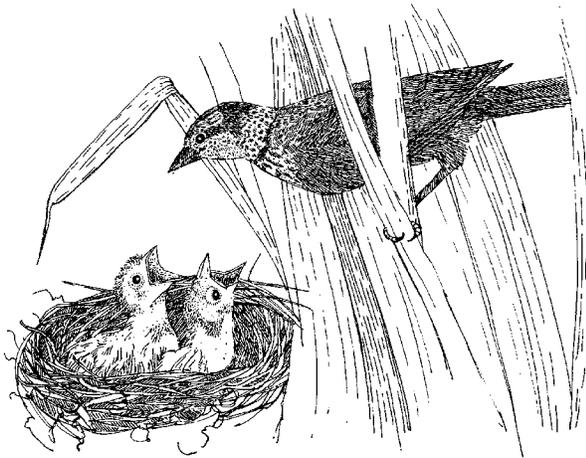


Spring Events

Presentations for March, April, and May

Frog Frenzy and Salamander Sashay

Many of us define spring as a time of revival of the spirit - often brought forth by the calling of the Frog Clan. Come and explore with sight and sound the fascinating life styles of our regional aquatic and terrestrial amphibians. Learn about incredible adaptations, micro-habitats and how we can share this landscape. **Saturday, March 20, 1:00-2:30.** Please register online or call the Interpretive Center.



Spring Birding by Ear

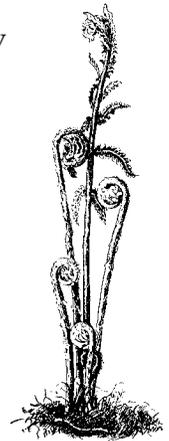
Migrants have arrived, breeding activity is at its peak, and there is no better time for listening. Join naturalist, Libby Mills, watching and listening for migrating birds of the Skagit Delta. Pack binoculars, field guides, and snack or lunch. **Meet at the Skagit Wildlife Area on Wilie Road, Fir Island.** Each class limited to 15 participants. Please register online or call the Interpretive Center. **Friday, May 14 and Saturday, May 15, 8:00-12:00.**

Grizzly Bears in Washington

Wildlife ecologist, Chris Morgan, will offer this presentation on grizzly bears in Washington. Here you will find much information about grizzly bears – their history in the North Cascades, status, ecology and behavior, the recovery process, bear identification, and many tips for coexisting with bears and other wildlife. Chris is co-director of the Grizzly Bear Outreach Project, executive director of Insight Wildlife Management in Bellingham, and is a well known and respected field educator. **Saturday, April 24, 1:00-2:30.** Please register online or call the Interpretive Center.

Wild Edibles of Spring

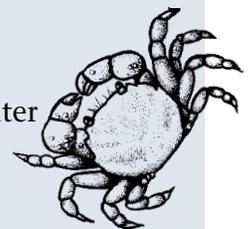
Come and witness the exciting new growth of spring. Join naturalists Marlee Osterbauer and Becky Stinson in this search for wild edible plants. They will share their extensive knowledge of plant uses and folklore. Weather may be chilly, so dress appropriately. You may want to bring a notebook and pencil. **Saturday, May 29, 2:00-4:00.** Please register online or call the Interpretive Center.



The Breazeale Interpretive Center is open
Wednesday-Sunday, 10:00-5:00.

Register online at
www.padillabay.gov

or call the Interpretive Center
for more information
(360) 428-1558.





A Sound Investment: The Northwest Straits Initiative Looks Ahead

For five years the Northwest Straits Commission and Marine Resources Committees in each of the seven counties bordering the Northwest Straits have helped mobilize numerous local organizations and hundreds of citizens to protect and restore the marine environment under the Northwest Straits Initiative.

To celebrate and evaluate the results of these past five years, the Commission invites you to join them on **June 4 and 5, in Everett** for the 2004 Northwest Straits Conference. Held at the new Everett Events Center in Snohomish County, the conference will highlight the great accomplishments and models for community-based restoration, and touch on emerging issues and ways that individual communities can get involved in citizen-based restoration models. **For more information on the conference, please go to www.nwstraits.org, email conference@nwstraits.org or call 425-947-4579.**

Kayaking in Padilla Bay

Paddle Padilla and Fidalgo Bays and enjoy spring on the water. An Island Outfitters guide and a Padilla Bay naturalist will lead these trips. No experience necessary, just come with a lunch, water bottle, and warm clothing (rain gear, non-cotton layers, hat). Minimum age is 12, with people under 18 accompanied by a parent. Participants meet at 10:30 at the Island Outfitters store on 24th & Commercial, Anacortes. Fee is \$55 per person for a 5 hour trip. Call Island Outfitters at 299-2300 to register. **March 13, March 27, April 3, May 1, and May 15.**

Films and Videos:

Sundays at 1:00 & 4:00

March	7	Forage Fish: Tiny Tales of Survival
	14	Jellies and Ocean Drifters (35m)
	21	The Beaches are Moving (60 min)
	28	Composting-Turning Spoils to Soil
April	4	Inland Sea: a Puget So. Fish Story
	11	The Return of the Salmon (30 min)
	18	Winged Migration (85 min)
	25	Aquatic Invasive Species (40 min)
May	2	Puget Sound: Heritage at Risk (27)
	9	Keep it Clean Downstream (25 m)
	16	The Worlds Below (40 min)
	23	Eagles (40 min)
	30	Padilla Bay (20 min)

Monthly Youth Programs Offer Fun Learning

Mini Explorers are the 3-5 year old learners. We look at a new topic each month, with stories, games, hands-on observations, art projects, and plenty of action. Call no more than 2 weeks ahead to register.

March 3 & 4, 10:00 & 1:00
All About Rocks- From exploding volcanoes to tiny grains of beach sand, rocks are the greatest!

April 14 & 15, 10:00 & 1:00
Estuary Babies - Padilla Bay is home to all kinds of animals when they are young. We'll look at tiny plankton and try to match up parents with their babies.

May 19 & 20, 10:00 & 1:00
Amazing Amphipods- Often called beach hoppers or sand fleas, these common critters can certainly hop in the sand. Let's go collecting and see how important the little things are.



Junior Ecologists are 6-9 year olds who have fun exploring the estuary. Excursions to the beach, science experiments, games, art projects, and studying life in the bay -- this program is guaranteed fun! Call the Interpretive Center to register.

March 12 & 13, 1:00-2:30
Swans - These large, graceful birds come from Alaska and the Canadian tundra to winter in the Skagit Valley. Learn all about them and take home your own swan game.

April 16 & 17, 1:00-2:30
Trees - Celebrate spring and explore the forests above the Interpretive Center. We'll see how important trees are for animals, clean water, clean air, and people.



May 21 & 22, 1:00-2:30
Eelgrass - Padilla Bay's most important plant is a great habitat for all sorts of critters. Come and get to know the green, watery world of the eelgrass meadow.

Water Quality Monitoring in Padilla Bay

The System-wide Monitoring Program was established to identify and track short-term variability and long-term changes in the twenty-six reserves of the National Estuarine Research Reserve System.

One aspect of the program at Padilla Bay is the measurement of basic physical water quality parameters. At five sites around the bay, battery operated YSI datasondes with an array of sensors take measurements every 30 minutes. They record temperature, salinity, dissolved oxygen, turbidity, pH, and water depth. Data is stored internally until the sonde is retrieved and the data downloaded to a computer, approximately every two weeks.

A second aspect, initiated in 2002, consists of collecting water samples twice a month at the YSI monitoring sites and analyzing them for various nutrients and chlorophyll. Chlorophyll is a compound in photosynthetic plants, and is an indicator of phytoplankton productivity.

A third component of the monitoring program involves collecting water samples at a single site over a 26 hour period. These samples are then analyzed in the lab for nutrients, chlorophyll, and suspended solids.

Padilla Bay also records meteorological data at a weather station at the Demonstration Farm at the south end of the Bay. We record temperature, humidity, wind (velocity and direction), light, and rainfall.

Water quality and weather data for Padilla Bay and other reserves around the country are available online at <http://cdmo.baruch.sc.edu>.



Paula Margerum retrieves a datasonde from Bay View Channel

This instrument has recorded two weeks of water quality data taken every 30 minutes. It will be replaced with a newly calibrated, freshly charged one. Though the process usually goes smoothly, there are sometimes surprises. Dead batteries, high winds, damage from boats, and animals setting up housekeeping on a probe can all be challenges to collecting complete and reliable data.

Data is downloaded to a computer and sent to a central database where it is stored along with data from other reserves. The information is then made available to researchers around the country.



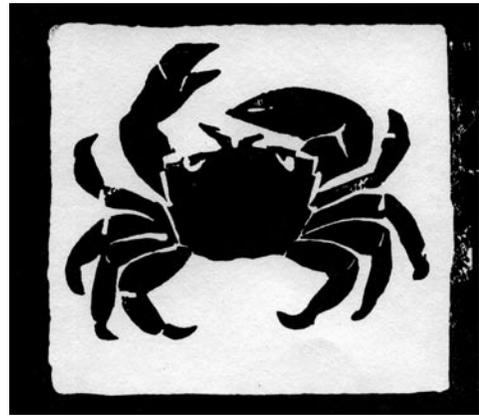
Deploying a 26 hour sampler in Padilla Bay

Twenty-six hour sampling used to mean round the clock shifts as all the staff took turns collecting samples, with bribes for the mid-winter 2:00AM crew. Now, this sampler is anchored in the bay and the staff go home to dinner while the collection is done automatically every hour. This instrument never grumbles about the wind or rain or cold.

Continued from Page 1.

Sharon spent many days controlling terrestrial invasive species such as English ivy and Canadian thistle. She developed a habitat management plan for the 64 acre site where the Interpretive Center is located. And she surveyed the shoreline for the presence of creosote logs and tires. She is now working to find funds for removing the toxic logs.

There are rumors that Sharon actually enjoys wearing muddy hip waders, but it is a clear fact that she cares deeply about Padilla Bay, and has put her muscle where her heart is. Thanks Sharon!



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Check Inside for the Summer Activity Schedule:

- Presentations
- Mini Explorers
- Junior Ecologists
- Films
- Kayaking

Padilla Bay



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